M/049/011

EXECUTIVE SUMMARY

Prepared November 9, 1998

Mine Name: Pelican Point Quarry
Operator: Larson Limestone
10360 North 8800 West
P.O. Box 398
Lehi, Utah 84043
Telephone: (801) 768-4820
Contact Person: Mark Hardman

I.D. No: M/049/011
County: Utah
New/Existing: Existing
Mineral Ownership: State & Fee
Surface Ownership: State & Fee
Lease No.(s): ML 46040
Permit Term: Life of Mine

Life of Mine: 30 years; however, the current plan describes the operations and designs for the next 10-year period.

Legal Description: Quarry is located on the east slopes of the Lake Mountains, west of Utah Lake in the E1/2 of Section 31, Township 6 South, Range 1 East, Utah County, Utah.

Mineral(s) to be Mined: Rock Aggregate - Limestone

Mining Methods: Typical open face quarrying operation using standard drilling and blasting techniques to extract limestone material.

Acres to be Disturbed: 33.1

Present Land Use: Mining

Postmining Land Use: Wildlife habitat and limited livestock grazing.

Variances from Reclamation Standards (Rule R647) Granted: Rule R647-4-111.7 for the highwall configuration and benching described in the ten year mine plan. This variance allows the highwalls to remain at angles steeper than forty-five degrees without backfilling. Rule R647-4-111.8 and -111.11 for leaving three building structures, the fuel storage area and silos, and the service road for use by the current land owner for purposes of grazing and feeding livestock in the area. The buildings will store hay, farm equipment and other ranching necessities. The fuel tanks will remain to provide fuel for the farm equipment. The silos will store grain.

Soils and Geology:

Soil Description: Donnardo Stony Loam is a very deep well drained soil on alluvial fans. The Upland Stony Loam and Amtoft Stony Loam are found on the hills and ridges. They are shallow and somewhat excessively drained.

pH: 7.8

Special Handling Problems: General lack of available topsoil for reclamation. Residual limestone fines will be amended with soil amendments to support vegetation.

Geology Description: The quarry is located within the Desert Limestone and Humbug Formations of Mississippian age. The Desert Limestone formation is mainly dark blue gray to black massive limestone. The Humbug formation is made up of limestone, quartzite, sandstone and dolomite.

Hydrology:

Ground Water Description: No ground water has ever been encountered during historic mining operations at this site. None is anticipated in future mining due to shallow depth of pits/quarries.

Surface Water Description: Four small sub-basins containing three small ephemeral drainages with offsite tributary areas are located within the general mine area.. The affected drainages are small with minimal peak runoff flows predicted.

Water Monitoring Plan: None required

Ecology:

Vegetation Type(s); Dominant Species: Wyoming big sagebrush, Indian ricegrass, juniper/pinyon, needle-and-thread, bluebunch wheatgrass (*Elymus spicatus*), cheatgrass (*Bromus tectorum*), broom snakeweed (*Gutierrezia sarothrae*).

Percent Surrounding Vegetative Cover: 56% living cover. The revegetation standard will be 39.2% vegetation cover.

Wildlife Concerns: None

Surface Facilities: Buildings, processing structures, conveyors, storage structures, fuel tank, pump house, water storage tanks.

Mining and Reclamation Plan Summary: . . . .

During Operations:

The Pelican Point Quarry extracts and processes limestone aggregate rock primarily for use as road base and other construction products. These uses for the aggregate rock product are the chief revenue source. When veins or lenses of "high-grade" limestone ore are encountered in the mining process, it is extracted and processed separately. These high-grade deposits have a higher calcium carbonate content and are lower in silicates. When feasible, this high-grade limestone is sold as a secondary product and is generally used in air emission control systems.

Limestone rock is quarried from the hillside by standard drilling and blasting methods. When blasting is conducted, it is contracted out to a qualified company trained in blasting design and practices. Typical blasting frequency averages six times a year. Once the rock is removed it is separated and adjusted to specific sizes in two facilities - the Crushing Plant and the Grinding Plant. When high-grade limestone ore is encountered, this material is delivered to the "Grinding Plant" where it is processed then stored in two silos to await transit to market.

To minimize the hazards for public safety the operator will: 1) close or guard any shafts and tunnels to prevent unauthorized or accidental entry; 2) properly dispose of trash, scrap metal and wood, and extraneous debris; 3) plug or cap exploration holes; 4) post appropriate warning signs in locations where public access to operations is readily available; and 5) construct berms, fences and/or barriers above highwalls or other dangerous excavations when required by DOGM.

After Operations:

Minimize hazards to the public safety and welfare by: 1) permanently sealing any shafts and tunnels; 2) appropriately dispose of any remaining trash, scrap metal and wood, buildings, extraneous debris, and other materials incident to mining; 3) plug exploratory holes; 4) post appropriate warning signs in locations where public access to operations is readily available; 5) construct berms, fences and/or barriers above highwalls or other excavations when required by DOGM.

Deleterious or potentially deleterious material shall be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled.

Disturbed areas will be regraded to a stable configuration and sloped to minimize safety hazards and surface erosion while providing for successful revegetation. Onsite roads and pads shall be reclaimed when they are no longer needed for operations or postmining uses. When a road or pad is turned over to the property owner or another land managing agency for continuing use, the operator shall turn over the property with adequate surface drainage structures and in a condition suitable for continued use.

Recontoured areas will be drill seeded where possible using principally native plant species. Seeding will be done in the late fall.

Except as noted in the Variance Section, all buildings and associated mining related facilities (including buildings, processing structures, conveyors, storage structures, etc.) will be dismantled and hauled off-site to appropriate salvage, scrap and disposal areas. Concrete footings, foundations, etc., will be crushed with on-site processing equipment and sold as aggregate products, or buried under the recontoured fill material.

The pad and fill materials where the surface facilities are located will also be sold as product. The fill materials will be removed to the approximate original contour and graded to a stable configuration. Once the original land configuration is achieved, the facilities area (including the haul road) will be ripped to a depth of 12 inches, followed by fertilization (if needed) and drill seeding.

Surety:

Amount: $91,000 (year 2003 dollars)
Form: Irrevocable Letter of Credit
Renewable Term: 5 years